

Listing of the Claims

1. (Currently amended) A method of managing the use of healthcare services, comprising the steps of:

collecting self-reported information from an individual about their perceived health for a predetermined set of predictive factors;

assigning, based upon said information from said individual, a separate value to each distinct predictive factor of said predetermined set of predictive factors;

generating, based upon a predetermined predictive model and said separate values assigned to said predetermined set of predictive factors, a risk level of said individual utilizing healthcare services at a predetermined level within a prospective time span;

wherein said assigning step comprises the following steps for each said distinct predictive factor of said predetermined set of predictive factors of:

determining, based upon said information, whether a ~~first~~ said distinct predictive factor is indicative of a high risk of said individual utilizing said healthcare services at said predetermined level within said prospective time span;

assigning, based upon said information, a first dichotomous value to said separate value for said ~~first~~ distinct predictive factor if said determining step determines that said ~~first~~ distinct predictive factor is indicative of said high risk of said individual utilizing said healthcare services at said predetermined level within said prospective time span; and

assigning, based upon said information, a second dichotomous value to said separate value for said ~~first~~ distinct predictive factor if said determining step determines that said ~~first~~ distinct predictive factor is not indicative of said high risk of said individual utilizing said healthcare services at said predetermined level within said prospective time span.

2. (Original) The method of claim 1, wherein said collecting step comprises the step of:

presenting said individual with a self assessment questionnaire designed to elicit said information from said individual for said predetermined set of predictive factors.

3. (Original) The method of claim 1, wherein said collecting step comprises the step of:

presenting said individual with a questionnaire designed to elicit said information from said individual for said predetermined set of predictive factors, said predetermined set of predictive factors consisting of past healthcare use factors, demographic factors, perceived health factors, disease factors, healthcare compliance factors, healthcare belief factors, healthcare preference factors.

4. (Original) The method of claim 1, wherein said collecting step comprises the step of:

presenting, to a web browser, a questionnaire that elicits said information from said individual for said predetermined set of predictive factors;

receiving, via said web browser, said information for said predetermined set of predictive factors in response to said presenting step.

5-7. (Canceled).

8. (Currently amended) The method of claim ~~1~~ 10, further comprising the steps of:

~~determining, based upon said risk level for said individual, whether a high risk exists that said individual utilizing said healthcare services at said predetermined level within said prospective time span;~~

determining, based upon said information from said individual, at least one intervention program for said individual in response to said probability value exceeding said predetermined threshold ~~determining step determining that said high risk exists that said individual utilizing said healthcare services at said predetermined level within said prospective time span.~~

9. (Original) The method of claim 1, wherein said generating step comprises the step of:

generating, based upon said separate values assigned to said set of predictive factors and a logistic regression formula of said predictive model, said risk level of said individual utilizing said healthcare services at said predetermined level within said prospective time span.

10. (Original) The method of claim 1, wherein said generating step comprises the step of:

generating, based upon said separate values assigned to said set of predictive factors and a logistic regression formula of said predictive model, a probability value indicative of said risk level of said individual utilizing said healthcare services at said predetermined level within said prospective time span; and

determining, based upon said probability value and a predetermined threshold,

said risk level of said individual utilizing said healthcare services at said predetermined level within said prospective time span.

Claims 11-21 (Canceled)

22. (Previously presented) The method of claim 1, further comprising the step of:

defining a first reference date in the future; wherein the generating step includes generating said separate values assigned to said predetermined set of predictive factors, a risk level of said individual utilizing healthcare services at a predetermined level in the time period between a present date and the first reference date.

Claims 23-27 (Canceled)

28. (New) The method of claim 10, wherein said determining said risk level of said individual utilizing said healthcare services at said predetermined level within said prospective time span step comprises the steps of:

comparing said probability value to said predetermined threshold;
identifying said individual as a high-risk person if said probability value exceeds said predetermined threshold; and
identifying said individual as a low-risk person if said probability value does not exceed said predetermined threshold.

29. (New) A method of managing the use of healthcare services, comprising the steps of:

- collecting self-reported information from an individual about their perceived health;
- determining, based upon said self-reported information, whether each distinct predictor variable of a predetermined set of predictor variables is indicative of a high risk of said individual utilizing healthcare services at a predetermined level;
- assigning a first dichotomous value to each said distinct predictor variable for which the determining step determines that said distinct predictor variable is indicative of said high risk of said individual utilizing said healthcare services;
- assigning a second dichotomous value to each said distinct predictor variable for which the determining step determines that said distinct predictor variable is not indicative of said high risk of said individual utilizing said healthcare services;
- generating, based upon a predetermined predictive model and said dichotomous values assigned to said predetermined set of predictor variables, a probability value of said individual utilizing said healthcare services at said predetermined level;
- comparing said probability value to a predetermined threshold value;
- identifying said individual as a high-risk person if said probability value exceeds said predetermined threshold value; and
- identifying said individual as a low-risk person if said probability value does not exceed said predetermined threshold value.

30. (New) The method of claim 29, wherein the collecting step includes the steps of:

- presenting said individual with a self assessment questionnaire comprising a

plurality of questions designed to elicit said information from said individual for said predetermined set of predictor variables; and

retrieving a plurality of answers from said individual answering said plurality of questions of said self assessment questionnaire.

31. (New) The method of claim 30, further comprising the steps of:

associating each said distinct predictor variable of said predetermined set of predictor variables to at least one of said plurality of questions of said self assessment questionnaire; and

assigning said second dichotomous value to any distinct predictor variable of said predetermined set of predictor variables for which said at least one of said plurality of questions associated with said any distinct predictor variable is unanswered or answered inappropriately.

32. (New) The method of claim 30, further comprising the step of:

identifying said individual as a high-risk person if said individual fails to answer or incorrectly answers more than a predetermined number of said plurality of questions of self assessment questionnaire.

33. (New) The method of claim 29, wherein the collecting step comprises the steps of:

presenting, to a web browser, a self assessment questionnaire designed to elicit said information from said individual for said predetermined set of predictor variables; and

receiving, via said web browser, said information for said predetermined set of predictor variables in response to the presenting step.

34. (New) The method of claim 29, wherein the collecting step comprises the steps of:

presenting a self assessment questionnaire to said individual designed to elicit said information from said individual for said predetermined set of predictor variables, said self assessment questionnaire including a scannable form; and

scanning said scannable form received in response to the presenting step to retrieve said information for said predetermined set of predictor variables.

35. (New) The method of claim 29, wherein the collecting step comprises the steps of:

presenting a self assessment questionnaire to said individual designed to elicit said information from said individual for said predetermined set of predictor variables using an interactive voice response telephone system; and

receiving said individual's responses to said self assessment questionnaire using said interactive voice response telephone system.

36. (New) The method of claim 29, wherein said first dichotomous value is equal to "1" and said second dichotomous value is equal to "0".

37. (New) The method of claim 29, wherein said predetermined predictive model is a logistic regression predictive model.

38. (New) The method of claim 37, wherein said logistic regression predictive model is represented by

$$z = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 \dots \beta_N X_N + \beta_{N+1} X_1 X_2 + C,$$

$$P_{\text{high_use}} = e^z / (1 + e^z)$$

wherein $\beta_1, \beta_2, \beta_3, \beta_4 \dots \beta_{N+1}$ represent regression coefficients,

$X_1, X_2, X_3, X_4 \dots X_N$ represent said predetermined set of predictor variables,

and

$P_{\text{high_use}}$ represents said probability value of said individual utilizing said healthcare services at said predetermined level.

39. (New) A method of managing the use of healthcare services, comprising the steps of:

presenting an individual with a self assessment questionnaire comprising a plurality of questions designed to elicit self-reported information from said individual about their perceived health for a predetermined set of predictor variables;

collecting said self-reported information from said individual through answers to said plurality of questions of said self assessment questionnaire by said individual;

associating each distinct predictor variable of said predetermined set of predictor variables with at least one of said plurality of questions of self assessment questionnaire;

determining for each said distinct predictor variable whether said distinct predictor variable is indicative of a high risk of said individual utilizing said healthcare services at a predetermined level based upon said answers to said at least one of said plurality of questions associated with said distinct predictor variable;

assigning a first dichotomous value to each said distinct predictor variable for which said determining step determines that said distinct predictor variable is indicative of said high risk of said individual utilizing said healthcare services;

assigning a second dichotomous value to each said distinct predictor variable

for which said determining step determines that said distinct predictor variable is not indicative of said high risk of said individual utilizing said healthcare services;

assigning said second dichotomous value to each said distinct predictor variable for which said at least one of said plurality of questions associated with said distinct predictor variable is unanswered or answered inappropriately;

generating, based upon a predetermined predictive model and said dichotomous values assigned to said predetermined set of predictor variables, a probability value of said individual utilizing said healthcare services at said predetermined level;

comparing said probability value to a predetermined threshold value;

identifying said individual as a high-risk person if said probability value exceeds said predetermined threshold value;

identifying said individual as a low-risk person if said probability value does not exceed said predetermined threshold value; and

identifying said individual as said high-risk person if said individual fails to answer or inappropriately answers more than a predetermined number of said plurality of questions of said self assessment questionnaire.

40. (New) The method of claim 39, wherein said collecting step comprises the steps of:

presenting, to a web browser, said self assessment questionnaire; and

receiving, via said web browser, said self reported information for said predetermined set of predictor variables in response to said presenting step.

41. (New) The method of claim 39, wherein the collecting step comprises the steps of:

presenting a self assessment questionnaire to said individual designed to elicit said information from said individual for said predetermined set of predictor variables, said self assessment questionnaire including a scannable form; and

scanning said scannable form received in response to the presenting step to retrieve said information for said predetermined set of predictor variables.

42. (New) The method of claim 39, wherein the collecting step comprises the steps of:

presenting a self assessment questionnaire to said individual designed to elicit said information from said individual for said predetermined set of predictor variables using an interactive voice response telephone system; and

receiving said individual's responses to said self assessment questionnaire using said interactive voice response telephone system.

43. (New) The method of claim 39, wherein said predetermined predictive model is a logistic regression predictive model represented by

$$z = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 \dots \beta_N X_N + \beta_{N+1} X_1 X_2 + C,$$

$$P_{\text{high_use}} = e^z / (1 + e^z)$$

wherein $\beta_1, \beta_2, \beta_3, \beta_4 \dots \beta_{N+1}$ represent regression coefficients,

$X_1, X_2, X_3, X_4 \dots X_N$ represent said predetermined set of predictor variables,

and

$P_{\text{high_use}}$ represents said probability value of said individual utilizing said healthcare services at said predetermined level.